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THE Farm Cost SITUATION

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CONTENTS

	Page		Page
General Situation	1	Building Materials, Supplies and Containers	16
Farm Labor	7	Pesticides	18
Farm Power and Machinery	9	Farm Land Values and Rentals	19
Feed	11	Interest, Taxes, and Insurance	20
Seeds	13		
Fertilizer	15		

GENERAL SITUATION

Production costs continued to rise during 1951. Total farm production expenses in 1951 probably are averaging about 12 percent above 1950, their previous record high. In the year ahead, still climbing, they may average about 5 percent higher than in 1951.

Supplies of products used in farm production are expected to be adequate to meet requirements for a large output of food and fiber in 1952. But some items will be relatively more scarce next year than they have been so far in the mobilization period. Even though the total production and supply of nearly all basic materials will be at peak levels during the next six months, defense needs will take substantial quantities of many materials. Efforts will be made to obtain materials needed by farmers to meet production goals. However, it will be necessary for

Goods and services used in production: Prices paid by farmers and farm wage rates, United States

(Index numbers 1935-39=100)

Year	Commodities, interest, taxes and wage rates 1/	Commodities only	Feed	Live-stock	Motor supplies	Motor vehicles	Farm machinery	Farm supplies	Building and fencing materials	Ferti-lizer	Seed	Wage rates 2/
1910	75	78	93	74	---	---	65	69	69	96	78	79
1911	77	79	94	69	---	---	65	71	71	96	90	81
1912	81	82	98	77	---	---	65	71	71	98	98	83
1913	81	81	92	90	---	---	65	73	70	99	81	86
1914	83	82	97	93	---	---	65	73	64	100	75	83
1915	84	84	96	92	---	---	67	78	70	106	75	83
1916	93	93	104	100	---	---	71	86	81	121	104	93
1917	121	126	167	128	---	---	80	115	94	133	138	117
1918	140	145	178	146	---	---	101	149	111	169	149	146
1919	153	157	198	148	---	---	105	157	130	178	170	170
1920	162	157	198	130	---	---	108	156	141	177	202	199
1921	118	103	100	71	---	---	105	135	108	149	104	129
1922	119	102	108	87	---	---	93	116	110	125	100	127
1923	128	111	129	90	---	---	97	120	110	131	105	142
1924	129	113	132	94	125	88	101	125	111	124	107	150
1925	131	117	136	100	133	89	101	124	113	136	122	150
1926	128	114	116	106	138	87	101	125	112	135	142	151
1927	129	114	122	119	123	89	101	122	110	118	125	152
1928	132	119	132	146	120	90	101	123	109	128	111	152
1929	132	118	130	143	119	92	100	122	110	127	113	154
1930	124	109	116	106	113	89	99	120	107	124	110	146
1931	106	91	82	74	96	89	98	111	95	112	88	115
1932	92	80	61	61	95	88	93	98	87	98	57	86
1933	87	80	70	56	93	87	90	91	90	91	61	73
1934	94	92	98	56	99	92	94	96	101	103	88	82
1935	98	98	101	94	99	93	97	96	99	102	105	88
1936	99	99	104	90	100	97	98	97	98	97	93	94
1937	106	107	118	102	102	101	100	102	102	101	130	107
1938	100	98	89	101	101	107	103	104	101	100	94	107
1939	98	98	88	113	98	102	102	101	100	100	78	105
1940	100	99	95	115	96	101	100	104	101	96	86	107
1941	106	105	103	130	99	107	101	111	108	96	82	125
1942	122	119	126	152	106	116	107	123	118	107	111	163
1943	138	132	149	173	109	121	111	137	123	114	139	217
1944	148	140	165	163	111	131	114	144	131	116	158	263
1945	155	142	164	178	111	135	115	146	134	118	162	297
1946	168	154	190	202	113	139	119	147	146	119	167	320
1947	191	181	225	252	124	161	135	159	191	131	192	346
1948	211	202	238	312	138	181	157	169	212	143	223	365
1949	203	192	196	277	140	199	176	176	210	147	202	354
1950	209	199	200	324	144	200	180	177	218	141	194	352
Jan.	203	191	191	283	---	199	---	---	---	---	---	349
Feb.	203	191	190	294	---	---	---	---	---	---	197	---
Mar.	204	193	191	306	140	198	178	175	206	---	194	---
Apr.	206	194	194	310	---	---	---	---	---	141	194	353
May	209	198	204	326	---	---	---	---	---	---	194	---
June	209	199	202	331	141	---	179	176	211	---	---	---
July	210	201	206	331	---	198	---	---	---	---	---	355
Aug.	210	201	207	327	---	---	---	---	---	---	---	---
Sept.	212	202	203	340	146	201	182	178	226	141	189	---
Oct.	212	202	201	341	---	---	---	---	---	---	---	353
Nov.	213	205	204	349	---	---	---	---	---	---	---	---
Dec.	216	207	210	355	149	204	183	179	229	---	---	---
1951												
Jan.	223	213	219	381	---	203	---	---	---	---	---	372
Feb.	227	218	222	407	---	---	---	---	---	---	193	
Mar.	229	221	224	415	150	212	188	183	239	---	195	
Apr.	234	223	225	426	---	---	---	184	---	149	198	396
May	233	221	227	392	---	---	---	---		---	197	---
June	232	220	222	394	150	---	197	191	241	---	---	---
July	231	219	221	389	---	213	---	---	---	---	---	393
Aug.	231	220	221	392	---	---	---	---	---	---	---	---
Sept.	233	222	223	402	---	---	---	---	---	150	199	---

1/ Revised.
2/ Simple average of quarterly indexes seasonally adjusted.

Note: For a list of items included in this table see "Agricultural Prices", Bureau of Agricultural Economics, January 31, 1950.

farmers to meet production goals. However, it will be necessary for farmers to anticipate their needs and make them known well in advance so that dealers can place orders and have supplies on hand when needed.

For the first 9 months of 1951 prices paid by farmers for commodities used in production averaged about 10 percent higher than for the full year 1950. Prices of all important groups of items used in production are higher than a year ago. Prices paid range from about 6 percent higher for fertilizer and motor supplies to 24 percent for purchased livestock. An increase in prices paid for replacement and feeder livestock and for feed means higher costs to the farmer who buys these items but also higher income to the farmer who sells them. The price of building materials has increased the most (11 percent) of any group of non-farm origin.

Farm output in 1951 is expected to be a record high; about 4 percent higher than in 1950, and 2 percent higher than in 1948, the previous peak. In order to get this higher production in 1951, farmers had to buy more production goods and services. The large volume bought at higher prices accounts for the new peak in production expenses.

The somewhat higher cost rates in prospect for 1952 places a high premium on cost reduction and efficient operation. In view of the relatively scarcity of some production goods, farmers will find it desirable to anticipate later needs and to make substitutions, if possible, for acarce and relatively high price items.

The supply of farm labor is expected to be smaller in 1952, and difficulties will be encountered in getting adequate numbers of workers in many local areas. But the labor supply is expected to be adequate to keep farm production at a high level. A moderate increase in wage rates is expected.

Production of farm machinery was generally adequate in 1951.. However, the rate of production in the last quarter was considerably less than in the first half, and production in the first quarter of 1952 will be lower still. These reductions raise some real questions as to the adequacy of future supplies of farm machinery, even though supplies of new machines, repair parts, and attachments are currently sufficient to meet most needs for planting 1952 crops (with the exception of some of the newer and larger labor saving machines). Prices of farm machinery are now about 10 percent higher than in 1950, and are expected to continue higher in 1952.

The total supply of feed concentrates for the 1951-52 feeding season is about 3 percent below the past two seasons, which were the highest on record. The number of grain-consuming livestock to be fed in 1951-52 is expected to be about 2½ percent greater than a year ago. As a result, feed concentrate consumption in the year beginning October 1, 1951 will exceed 1951 production and reduce carry-over. Prices received by farmers for feed grains and hay are higher than a year ago. Commercial feeds also are higher except for meat scraps. Returns per dollar of feed cost, however, are generally above the prewar average. They are above a year ago for eggs, milk, butterfat, beef cattle and sheep, but lower for hogs and chickens.

The current supply of clover, grass, and winter cover crop seeds is down slightly from a year ago, but considerably above the 1940-49 average. Prices of most legume and grass seeds are now slightly lower than last spring.

Total supplies of fertilizer for the 1952 crop season will average only slightly higher than for the past season and probably will not be sufficient to meet prospective demand. Supplies of phosphoric acid fertilizers are likely to be about 8 percent below those for last season. Supplies of nitrogen and potash fertilizers for the next crop season will also be very tight, even though they may be a little greater than this year--

perhaps as much as 5 percent greater. Farmers in many areas can substitute nitrogen and potash, and also rock phosphates to some extent for the relatively scarce phosphoric acid fertilizers. Fertilizer prices are about 6 percent higher than a year ago and are expected to average slightly higher in 1952.

The supply of pesticides generally was adequate for farmers' needs in 1951. Production of preferred pesticides such as DDT and benzene hexachloride were increased substantially in 1951. Supplies of most important pesticides except those containing sulphur, lead and copper are expected to be sufficient to meet demands in 1952 if minimum needs can be purchased early, and if farmers use substitutes or alternate compounds in a few cases where the materials they have generally used may be inadequate. Liquid grain fumigants may be in tight supply.

Prices of pesticides rose sharply at the beginning of the 1951 season and have remained at about the same level throughout the season. They are expected to continue near present levels in 1952.

Supplies of most building materials are expected to be adequate to meet needs in 1952, but supplies of aluminum, copper and some other metal products will be tight.

Current costs of building materials, supplies and fencing materials are about 11 percent above last year's average. They are expected to continue at about this point or slightly higher during the next new months.

Farmers who rented land on a cash or crop share-cash basis in 1951 probably paid the highest rental rates on record. Some further increase is expected in 1952. Landlord's expenses on leased lands in 1951 are expected to total about 7 percent more than in 1950, with expenditures for building depreciation and repair, cotton ginning and feed up the most. Net rental income in 1951 may be about 10 percent higher than in 1950, but 15 percent less than in 1947.

Interest changes on farm mortgage debt in 1951 will be about 9 percent higher than in 1950. A further increase is expected in 1952 as a result of a higher volume of debt and a slight increase in interest rates on new mortgage loans.

Taxes also increased in 1951 and farmers can expect to pay still more taxes in 1952. The increase next year will reflect higher tax rates in almost every important tax paid by farmers. Assessment rates of farm mutual fire insurance companies averaged slightly lower in 1950 than in 1951, but rates on windstorm increased because of heavy windstorm losses in some areas in 1950.

Farm Labor

A smaller supply of farm labor and a moderate increase in farm wage rates are expected in 1952. Greater difficulties will be encountered in getting an adequate number of workers in many local areas. But the labor supply next year is expected to be adequate to keep farm production at high levels if effective recruitment campaigns are conducted.

Farm wage rates in 1951 are averaging about 10 percent higher than last year (table 1). High non-farm employment and a smaller labor supply on farms will likely result in a further rise of around 5 percent in wage rates in 1952. The extent of the rise in particular areas may be affected by developments in the wage stabilization program for agriculture.

Several factors will tend to decrease the supply of agricultural workers in the year ahead. Estimates are that defense industries may absorb about 2.5 million additional workers by the end of 1952. Part of these will come from normal growth in the labor force and part from drawing extra workers into the labor force. But as unemployment is now near a minimum level, most of the remaining additions to defense industry employment will have to come through shifts from other industries, including agriculture.

The armed forces will continue to draw on the farm labor force. However, the rotation system will mean additional inductions. With the 1951 crop season nearing its close, it is expected that there will be an increase in the number of young farmers inducted into the armed forces during the winter months. Under the operation of the Universal Military Training and Service Act, deferments may be fewer and renewed less frequently, with possibly more emphasis on postponement of induction. There will be some return of workers to farms through release from the armed forces. Those returning generally will be older and more experienced than those inducted. Nevertheless, farmers will face the problem of making provisions for replacing workers who are drafted.

Because of the anticipated losses of farm workers to both industry and the armed forces, the supply of year-round workers will continue to be tight.

The supply of seasonal workers also is expected to decline next year. In addition to the losses to industry and the armed forces, it is possible that stricter controls on the entry of "wetbacks" from Mexico may decrease the seasonal labor supply below that of 1951, especially in the Southwest. A record high number of "wetbacks" appear to have entered the country so far this year. Most needs for seasonal workers in 1952 probably could be met from domestic sources if there are vigorous recruitment and training programs. However, there will be an increased demand for foreign workers to supplement local supplies in some areas. The present international agreement with Mexico expires February 11, 1952 and will require renegotiation.

In agriculture as a whole, technological progress and increasing productivity of farm labor will continue to cushion the effects of further decreases in the labor supply next year. Output per man-hour on farms is now at a near-record level and is expected to rise even higher next year. Thus, in terms of the overall average, labor costs per unit of farm output should not change greatly despite the expected rise in farm wage rates. However, a great many farmers are likely to feel the pinch of rising wage rates, owing to their inability to make significant increases in output per hour.

Table 1.- Farm wage rates and related data, United States, 1935-39 average and 1940-51

(Index numbers, 1935-39 = 100)

Period or year	Farm employment: Total 1/	Farm employment: Family 1/	Farm employment: Hired	Man-hours of farm work 2/	Farm output 3/: Total	Farm output 3/: Per man-hour	Gross farm income per man-hour 4/	Farm wage rates 5/
1935-39	100	100	100	100	100	100	100	100
1940	100	99	103	98	110	112	107	107
1941	98	97	101	97	114	113	135	125
1942	98	97	101	101	128	127	176	163
1943	97	97	96	100	125	125	219	217
1944	95	97	93	100	130	130	231	263
1945	93	96	83	95	129	136	255	297
1946	95	98	85	93	134	144	298	320
1947	96	98	83	91	129	142	362	346
1948	95	96	91	90	141	157	369	365
1949	92	93	89	90	140	156	341	354
1950	89	90	85	84	138	164	374	352
1951 6/	86	87	83	89	144	162	403	389

1/ Includes farm operators and members of their families working without wages.

2/ Total man-hours of farm work in terms of the time required by average adult male workers.

3/ Net calendar-year production for eventual human use.

4/ Because of the increase in volume of output and the increase in the price of farm products, gross farm income per man-hour has increased at about the same rate as have farm wage rates from the prewar years of 1935-39 to 1951.

5/ Simple average of quarterly indexes seasonally adjusted.

6/ Preliminary. Estimate of farm output for 1951 based chiefly on October 1951 report of the Crop Reporting Board.

Farm Power and Machinery

Costs of farm machinery and power in 1952 are expected to be above the 1951 record high. Retail prices of farm machinery, tires and motor fuel in 1951 were the highest in history. A continuation of the high 1951 prices for these items, and some further moderate price increases, is in prospect for 1952. Feed costs per head for keeping workstock in 1952 probably will be somewhat below the peaks of 1948 and 1947, but higher than for other recent years.

Current wholesale prices of farm machinery are at new highs, and about 10 percent above the average for the first half of 1950. Most of the recent price increases took place in the last half of 1950 following the Korean outbreak. Wholesale prices now are about 1 percent higher than in December 1950.

Production of farm machinery was at a high level the first half of 1951, but production in the last half of 1951 will be at a lower level. For 1951, as a whole, the total output of farm machinery probably will be near the level of 1949.

With farm incomes at relatively high levels and with further reductions expected in the farm labor force, demand for farm machinery in 1952 is expected to continue strong. Beginning with June 1951, farm machinery manufacturers have been allocated materials with which to produce farm machines. It is expected that materials will continue to be allocated to manufacturers in 1952. The DPA allotments of controlled materials for the first quarter of 1952 announced October 12 should permit production of agricultural machinery at 80 to 85 percent of the 1949-50 level. Supplies of new machines, repair parts, and attachments are likely to be adequate to attain farm production goals in 1952. However, supplies may be relatively short for some of the newer larger labor-saving machines.

The dollar value of exports of farm machinery in the first half of 1951 was about one-fourth larger than in the same period in 1950 and about the same as the high exports during 1949. The volume of machinery exported in the first six months of 1951 was about 13 percent higher than in the same period in 1950, but about 10 percent lower than in the first half of 1949. The increase in exports this year has occurred notwithstanding reduced shipments to most European countries. The export demand for machinery is reported to be strong, but the volume of exports in 1952 will be influenced to a considerable extent by the volume of production and by the domestic demand for machinery in this country.

Farmers' purchases of machinery have been large for more than a decade. The exception was in 1943 when output of farm machinery was drastically reduced by wartime restrictions. Preliminary estimates indicate that on January 1, 1951 there were 4,100,000 tractors of all kinds on farms in the United States. On January 1, 1940 there were only 1,545,000 tractors. In 1940 few of the tractors were of the garden type whereas in 1951 about 7 percent were of this type.

On January 1, 1951 the total volume of machinery and equipment on farms other than the power machines was about 170 percent greater than in 1940. In view of the large purchases being made in 1951, total machinery on farms on January 1, 1952 will show a further increase.

The number of work animals (horses and mules 3 years old and over) on farms now is the lowest in more than a century (table 2). Their number has

Table 2.- Horses and mules and tractors on farms and cost of keeping horses and mules and of using farm tractors, United States, 1935-39 average and 1940-51 1/

(Index numbers 1935-39 = 100)

Calendar year or period	Tractors on farms, number January 1	Horses and mules on farms, number: all ages January 1	Colts under 1 year on farms, number January 1	Horses and mules all ages, value per head January 1	Feed cost per head 2/	Prices paid by farmers for: New tractors 3/	Prices paid by farmers for: Gasoline	Prices paid by farmers for: Tires 6.00 x 16
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1935-39	100	100	100	100	100	100	100	100
1940	124	92	101	90	94	96	95	92
1941	135	90	98	81	104	101	99	95
1942	152	87	85	73	132	102	103	117
1943	169	84	69	95	174	99	103	130
1944	178	80	62	98	196	111	103	136
1945	195	76	54	86	192	113	103	131
1946	208	70	41	80	221	126	106	133
1947	225	64	35	84	283	142	118	127
1948	253	58	31	79	297	158	131	128
1949	281	52	27	72	230	174	134	124
1950	307	47	22	63	240	175	135	139
1951	4/ 330	43	18	56	5/ 270	6/ 189	7/ 136	7/ 165

1/ The 1935-39 averages were: horses and mules all ages, 15,750,000 head; value per head, $97.68; feed cost per head, $39.34; colts under one year of age 744,000 head; tractors, 1,244,000; prices paid by farmers for new tractors, $1,106; gasoline $0.19; and tires, $12.70.

2/ Based on 25 bushels each of oats and corn and 2 tons of loose hay.

3/ Tractor prices are for medium size (20-29 BHP) wheel tractor equipped with rubber tires.

4/ Preliminary estimates.

5/ Average of the first 8 months.

6/ Average prices paid in March.

7/ Average prices paid in March and June.

declined each year since 1923, but at a greater rate in recent years. The number of work animals available for work on the 1952 crops will be only about 25 percent of the peak number of 1923. The number of motor trucks has been increasing. The estimate for January 1, 1951 of 2,350,000 motor trucks on farms represents an increase of about 125 percent since 1940 and of 60 percent since 1945.

Feed

Prices received (and paid) by farmers for feed grains and hay are about 11 percent higher than a year ago, and are likely to continue higher in 1952. Prices paid for commercial mixed feeds and of most other byproduct feeds also are higher. However, feed prices in general average a little lower now than six months ago. Feed grain prices in 1952 are expected to increase somewhat from present levels and may average about 5 percent higher than in 1951. Protein feeds may not be as high relatively as the feed grains because of the comparatively larger supply, but total feed costs in the next 6 months will average higher than in the same period last year.

Total feed supplies in relation to livestock numbers are smaller than last year. More feed will be used in the current feeding year than was raised in 1951.

The supply of feed grains and other concentrates totals about 176 million tons for the 1951-52 season, about 3 percent less than the record high supply of the two preceding seasons (table 3). Production of feed grains this year probably will be about 5.4 million tons below 1950. Supplies of byproduct feeds will be large. Oilseed cake and meal supplies will be larger than ever before, the principal increase being in cottonseed cake and meal.

The number of grain-consuming livestock to be fed in 1951-52 is expected to be about 181 million animal units, up about 2½ percent from 1950-51. The chief increases are in hogs, poultry, and beef cattle. Livestock will consume 138 million tons of concentrates, if the rate of feeding is the same as last year. Assuming that 19 million tons of concentrates will go for seed, food, industry, and exports, the carryover of concentrates at the end of the 1951-52 season would be about 20 million tons, or down about one-third from this year. Thus the total estimated requirements of feed concentrates exceed estimated production from 1951 crops by 9 million tons, with a corresponding reduction in stocks.

The alternative of larger feed grain crops or lower livestock production seems unavoidable in the next few years, although more efficient use of feed can help improve the prospects. Table 4 indicates that over 60 percent of the feed concentrates are used for hogs and poultry. Tight feed supplies therefore would have the greatest effect on these two classes of livestock.

Hay supplies in most of the northern half of the country are ample for the livestock to be fed, in 1951-52, although the quality may be below the average. Hay supplies are short locally in many southern areas because of dry weather. Pasture conditions in September and October were below average in most of the States from Ohio and Pennsylvania south to the Gulf and in much of the Southwest and the Pacific Northwest.

Table 3.- Feed concentrate supply and utilization and livestock fed, United States, 1937 to 1951 1/

Year beginning October	Supply				Utilization						
	Stocks feed grains beginning of year	Production feed grains	Wheat, rye and by-product fed	Total	Seed, food, industry and exports of feed grains	Concentrates fed to livestock	Stocks of feed grains end of year 2/	Animal units grain-consuming livestock fed annually	Production feed grain per animal unit	Supply concentrates per animal unit	Concentrates fed per animal unit
	Million tons	Million tons	Million tons	Million tons	Million tons	Million tons	Million tons	Million units	Tons	Tons	Tons
Av. 1937-41	16.9	99.3	19.9	136.1	12.1	105.0	19.9	153.1	.65	.89	.69
1942	18.5	120.8	33.1	172.4	13.3	142.0	16.2	192.4	.63	.90	.74
1943	17.8	112.1	34.6	164.5	12.8	138.8	11.6	193.2	.58	.85	.72
1944	11.6	116.7	29.8	158.1	15.2	129.0	14.9	173.7	.67	.91	.74
1945	14.9	114.4	25.9	155.2	13.3	133.3	10.9	167.8	.68	.92	.79
1946	10.9	124.3	23.7	158.9	19.3	123.9	13.9	161.4	.77	.98	.77
1947	13.9	95.4	25.1	134.4	13.6	112.2	7.9	155.9	.61	.86	.72
1948	7.9	138.3	24.3	170.5	17.7	123.5	30.8	162.9	.85	1.05	.76
1949	30.8	125.9	25.8	182.5	17.2	133.1	31.2	170.1	.74	1.07	.78
1950	31.2	125.0	26.7	182.9	20.5	133.9	29.0	176.8	.71	1.03	.76
1951 3/	29.0	119.6	27.5	176.1	18.5	138.0	20.0	181.0	.66	.97	.76

1/ From Feed Statistics, page 2, December 1950, BAE, and Feed Situation, September 1951, Table 2.

2/ Stocks do not necessarily exactly equal supply less feed and other utilization because of a difference in the crop year for different feed grains. Stocks at end of 1942 exclude grain at interior mills, elevators and warehouses but at beginning of 1943 include this grain.

3/ Preliminary.

Table 4.- Percentage of feed concentrates 1/ fed to different kinds of livestock, United States, year beginning October 1951 with comparisons

Kind of livestock	Average 1937-41	Average 1942-44	1949	1950	1951 2/
	Percent	Percent	Percent	Percent	Percent
Dairy cattle	18.1	17.3	18.4	17.8	17.4
Beef cattle	8.0	8.0	11.0	10.5	10.8
Sheep	1.3	1.1	.6	.6	.7
Poultry	21.6	23.6	24.8	25.6	26.2
Hogs	36.8	39.0	37.8	38.9	38.8
Horses and mules	11.5	8.0	4.2	3.5	3.1
Other	2.7	3.0	3.2	3.1	3.0
Total	100.0	100.0	100.0	100.0	100.0

1/ Grains and byproduct feeds. Does not include corn in silage, or skim milk fed as a liquid.

2/ Preliminary estimates based on indications in July 1951, assumes same rate of feeding as in 1950-51.

For most livestock enterprises returns per dollar of feed cost in September are generally above the prewar average (table 5). Returns are considerably above those of a year ago except for hogs and chickens. Returns from hogs are about 18 percent below a year ago, 10 percent below the March figure, and slightly below average. Returns per dollar of feed cost for eggs, milk, butterfat, and beef are above returns six months ago. However, returns from sheep are less than then because of the decrease in the wool prices since last spring. Separate data are not available for returns to the broiler industry. But production has been expanding rapidly, indicating that returns are favorable. The Maryland State Department of Markets reported for the week of September 28 a price of 26.5 cents per pound for broilers and 5.33 cents per pound for feed. This indicates returns of $1.42 per $1.00 of feed, assuming 3½ pounds of feed are fed per pound of broiler.

Seeds

Farmers currently are paying lower prices than last spring for most legume and grass seeds. Of the 16 kinds and varieties of these seeds included in the spring and fall retail seed price surveys, prices of all except one--crested wheatgrass--are lower this fall than last spring. However, compared with prices a year ago, prices this fall are higher for 9 varieties and lower for 13. Seeds with higher prices are common and Grimm alfalfa, alsike clover, common ryegrass, Wild Winter peas, common and Willamette vetch, purple vetch, and blue and sweet lupine. On the other hand, prices are lower than last fall for red, crimson, white, and Ladino clover, Austrian Winter peas, hairy vetch, and all the grasses except common ryegrass (a winter-cover crop).

The price changes have been less than 25 percent for any of the seeds, except reseeding crimson clover and smooth brome, which are one-third lower in price this fall than last, and sweet lupine prices, which are 2½ times those of last fall. Retail prices of the clovers and alfalfa as a group, and of the winter cover crop seeds, average the same this fall as last. Grass-seed prices average 16 percent lower than a year ago.

Table 5.- Returns per $1.00 of feed cost, United States, September 15, 1951, with comparisons 1/

Item	1935-39 average	September 15, 1950	March 15, 1951	September 15, 1951
	Dollars	Dollars	Dollars	Dollars
Eggs	1.72	1.56	1.56	1.97
Chickens	1.84	1.47	1.61	1.41
Milk	1.92	1.89	1.94	2.03
Butterfat	1.55	1.37	1.40	1.53
Hogs	1.50	1.80	1.64	1.48
Beef	1.39	2.35	2.53	2.60
Sheep	1.44	1.92	2.64	2.04
	(Index numbers 1935-39 = 100)			
	Percent	Percent	Percent	Percent
Eggs	100	91	91	115
Chickens	100	80	88	77
Milk	100	98	101	106
Butterfat	100	88	90	99
Hogs	100	120	109	99
Beef	100	169	182	187
Sheep	100	133	183	142

1/ The following quantities of feed were used in calculating feed cost: 7 pounds of poultry ration per dozen eggs; 4½ pounds of poultry ration per pound of chicken; 7½ bushels of corn plus 20 pounds of soybean meal per 100 pounds of hogs; 30 pounds of concentrate ration fed to milk cows in milk selling areas plus the value of 110 pounds of hay, per 100 pounds of milk; 7½ pounds of concentrate ration fed to milk cows in cream selling areas plus the value of 27.5 pounds of hay in Minnesota and Iowa, per pound of butterfat; 3 bushels of corn plus 600 pounds of hay per 100 pounds of beef cattle; 2 bushels of corn plus 1,500 pounds of hay per 100 pounds of sheep and lambs. It was assumed that for each 100 pounds of sheep and lamb produced 20 pounds of wool was produced from the same feed. The quantity of hay for milk cows, beef cattle and sheep includes an allowance for silage and pasture. It was assumed that the feed nutrients from pasture would cost 1/4 as much per pound as they would if obtained from hay.

The 1951 production of 26 kinds of clover, grass, and winter cover crop seeds for which forecasts have been made is only about half as large as in 1950. The decrease was sharpest for the winter-cover crops. Fortunately, the record carryover of all these seeds at this time, which is 8 times as large as last year and 4 times the average, nearly offsets the sharp reduction from the record production of last year.

The current supply of these 26 kinds of seeds, totaling over 1 billion pounds, is 8 percent smaller than last year's record supply; but 72 percent larger than the average for the 1940-49 crops. Supplies of clover and grass seeds are each 2 percent smaller than a year ago, and the supply of winter cover crop seeds is 11 percent below. However, the supply of each group is above the 10-year average, ranging from 17 percent above for the grasses and 45 percent above for the clovers to 117 percent above for the winter cover crops. With minor exceptions, there should be enough seed of each of the 26 kinds to meet planting requirements this fall and next spring.

Fertilizer

Fertilizer prices have risen only slightly since April 1951 when they were about 6 percent higher than in the fall of 1950. However, a further rise of about 4 or 5 percent is expected this fall.

Supplies of nitrogen (N) and potash (K_2O) for the 1951-52 season may each be about 5 percent higher than for the previous year. However, more would be used if the supplies were larger. The supply of phosphoric acid (P_2O_5) probably will be about 8 percent less than last year, because of shortages of sulfur and sulfuric acid. This means that the total quantity of all 3 nutrients probably will be only slightly higher than for the last crop season.

Nitrogen: During the 1950-51 season approximately 1,285,000 tons of nitrogen (N) were available for use by farmers. The supply for the coming season is expected to be about 1,350,000 tons, or around 5 percent larger than last year, assuming imports and exports at last year's levels. An increase in industrial demand or change in military requirements could alter this prospective increase.

A combined total of almost 600,000 tons of nitrogen is expected from several new ammonia plants which are scheduled to be under construction during the first half of 1952. Also the Morgantown Ordnance Works is expected to go into production in the first half of 1952. The Morgantown plant may contribute some nitrogen for the 1952 crop. The scheduled construction of new plants cannot be counted on to contribute much nitrogen to either the 1952 or 1953 crops, and the full effect of the expansion will not be felt until the 1955 crop.

Phosphates: The 1950-51 supply of P_2O_5 was about 2,235,000 tons. Some curtailment is expected in production of superphosphate owing to scarcity of sulfur and sulfuric acid. Allowing for such cutbacks and assuming normal export/import relationships, the 1951-52 supply is tentatively estimated at about 2,050,000 tons of P_2O_5, or about 8 percent less than in 1950-51.

The sulfur supply is tight. The overall demand for sulfur-sulfuric acid increased greatly during 1951. Production of crude sulfur during the first seven months of 1951 was approximately 42,000 tons more than during the same period in 1950. Producers' stocks have increased slightly. Sulfur exports for the year 1951 may reach a total of approximately 1,325,000 long tons, including crude and refined sulfur. This would be about 90 percent as large as exports in 1950.

New facilities are being installed, and in some cases are now operating, to recover sulfur from various sources. Methods of conservation of crude sulfur by substitution of sulfur bearing materials have been recommended, as well as the use of other materials where applicable.

By order of NPA, effective November 1, 1951, the use of sulfuric acid will be limited to 90 percent of that used in 1950. This includes the use of sulfuric acid for manufacture of superphosphate.

Potash: A record total of 1,445,000 tons of potash (K_2O) was available for use in the 1950-51 season. Although a substantial expansion program is under way in the Carlsbad area, the contribution of the new facilities to the 1951-52 supply is likely to be small. The probable volume of imports is uncertain. A conservative estimate of an increase of about 5 percent in the potash supply seems warranted, or about 1,515,000 tons of K_2O for the 1951-52 season.

There are two new potash mining facilities which over the next year or two will add substantially to the domestic supply. One facility is expected to come into production during the spring of 1952.

With little increase in the supply of fertilizer and high demands for food and fiber, efficient use of available supplies becomes a key problem. The relatively short supply of P_2O_5 particularly makes it desirable to consider (1) using rock phosphate in place of superphosphate, and (2) how far the more plentiful nutrients, N and K_2O may be substituted without impairing yields and increasing costs. Farmers in some areas, Illinois and Kentucky, particularly, have been using raw rock phosphate for years. Undoubtedly, rock phosphate could be used to replace some superphosphate in other areas as well. Because P_2O_5 from rock phosphate becomes available at a relatively slow rate heavy applications are essential to provide currently the same amount of P_2O_5 which would be available from a much lighter application of superphosphate. This heavier initial application requires a larger cash outlay which is more in the nature of a capital investment, similar to lime, rather than an annual expense.

Farmers in some situations and with some crops can substitute more nitrogen and potash fertilizers for smaller quantities of phosphate fertilizers and obtain equally good yields with little change in costs. Where feasible and economical, such substitutions can help alleviate the prospective shortage of phosphate supplies.

Building Materials, Supplies and Containers

The present cost of materials used in the construction and maintenance of farm buildings is only slightly below the record high of earlier this year. It is over double the prewar level. For example, the cost of materials needed to construct a typical poultry house large enough for 200 layers (16' x 48') was about $802 in June compared with $717 a year earlier and about $300 in 1935-39.

The cost of fencing materials has gone up about 20 percent since June 1950. At that time the cost of materials required to build a mile of woven wire fence with two strands of barbed wire was about $583. The same materials which could have been bought in 1935-39 for $295 now cost about $700. (It takes a mile of fence to enclose a square field of 40 acres and more than a mile if the field is oblong).

Even though the total production and supply of practically all basic materials will be at a peak rate during the next six months, defense needs will take a substantial amount of some materials so that a part of the civilian demand will not be supplied. However, the essential place which agriculture has in the present emergency is recognized, and efforts are being made to insure that agriculture will get at least the minimum materials needed to meet production goals. Farmers should figure out well in advance their needs for scarce materials and supplies, in order to be sure of getting the amounts needed.

Galvanized products such as wire fencing, roofing, sheet metal siding, and pipe, and aluminum roofing and siding will be the most difficult to obtain. Production is already down and a drastic reduction is in prospect for the remainder of the year with no improvement in sight for next year. The production of aluminum roofing and siding in the first nine months of 1951 was only 60 percent of 1950 production. Black pipe, painted wire fencing, and uncoated roofing to be painted at the time of use may be available to supplement galvanized materials for repair and essential construction. The supply of other steel products will vary according to shape and form. Structural steel will be strictly regulated. Nails probably will be in ample supply.

The lumber situation has eased off from the previous period of tight supply and should be ample. Plywood may get increasingly scarce as more of it is substituted for sheet metal.

Products such as builder's hardware, electrical devices, and plumbing and heating equipment are expected to be in ample supply for at least the next six months. Copper tubing, pipe, bare wire and covered wire will be short of demand but probably sufficient for the most essential farm needs.

Cement production is only slightly below capacity, but area shortages may occur because of transportation difficulties and extraordinary demands of defense programs affecting certain areas. Clay products and composition products are expected to continue in ample supply.

Production of baling wire and ties has been greatly increased and is expected to be adequate for the coming year. Likewise baler and binder twine should be adequate though the price will be considerably higher next spring than in the spring of 1951, because the price of raw materials has doubled.

The supply of burlap is ample to meet current and prospective needs. The current wholesale price is considerably lower than in the spring of 1951. The supply of cotton bags is expected to improve.

Essential farm needs for boxes, crates, and baskets will be met but efforts should be made to conserve containers wherever possible. Materials will be available to repair and replace milk cans but the total number of cans in use cannot be increased without increased allocation of material.

Pesticides

Prices of pesticides in 1952 are expected to continue at about the same level as in 1951. Prices of some important pesticides rose sharply at the beginning of the 1951 season, and have remained at the higher level throughout the season.

The supply of pesticides generally has been adequate for the 1951 crop. Production of the preferred pesticides was increased in 1951 substantially above that of 1950. About 25 percent more DDT and 50 percent more benzene hexachloride were produced in 1951 than in 1950. The increase in production of the preferred pesticides served to restore stocks of most pesticidal materials to a more nearly normal position than was the case at the end of the 1950 season. Consumption of pestitides in 1951 appears to have been heavy, although infestations of the boll weevil on cotton and the European corn borer on corn were not so severe as in 1949 or 1950.

Supplies of benzene and chlorine, used in the manufacture of DDT, benzene hexachloride, methoxychlor, toxaphene, various forms of 2,4-D, and certain other synthetic pesticides probably will be adequate for next year, even though the demand for these products is expected to be greater because of the expanding use of pesticides and related agricultural chemicals. The supply of lead arsenate will be short primarily because of difficulties in obtaining lead. Copper sulphate may be in tight supply due to shortages of copper and sulphuric acid.

Sulphur is still in short supply, and will continue short next year. The amount available for the manufacture of pesticidal materials probably will be less in 1952 than in 1951. Synthetic materials are being produced to replace sulphur as the active ingredient in many pesticides, but sulphur also is required in manufacturing many pesticidal chemicals. Some additional plant capacity probably will be available for the manufacture of synthetic fungicides to take the place of sulphur and copper compounds. Also synthetic insecticides such as TEPP parathion, Aramite, sulphenone, and others used to control mites will be available to replace some sulphur.

Grain fumigants will be relatively scarce next year. Carbon disulphide and carbon tetrachloride used in the manufacture of most fumigants will be in short supply. Since the production of carbon tetrachloride, a basic ingredient in all liquid grain fumigants, is dependent upon carbon disulphide, farmers and supervisors of grain storage facilities who have a choice should plan to utilize the equally effective recommended basic formula which contains ethylene dichloride with a lesser proportion of carbon tetrachloride and does not contain any carbon disulphide. Thorough cleaning of bins and other grain storages and spraying with a residual insecticide are measures which contribute to a reduction in the need for liquid grain fumigants.

Greater uses of liquid concentrated pesticides will raise the demand for steel containers. With the limited supply of steel, some shortages may be expected. Other containers for handling pesticides also may be scarce.

Farmers have been shifting rapidly from the use of dusts to sprays for controlling insects on cotton. Also, they have been using sprays early in the season to hold down insect infestation rather than waiting until damage from insects becomes a serious threat. Sprays frequently are more effective than dusts on cotton, and can be applied throughout the day under weather conditions which preclude dusting.

Many of the pesticides not used this season can be carried over to next year if properly stored. However, oil solutions containing emulsifiers may deteriorate. Dusts can be carried over if kept in a dry place.

As the new season approaches, farmers can aid in the distribution of pesticides by purchasing their minimum needs early. Many insects can be controlled by the use of one of several kinds of insecticides. Cultural practices, such as planting insect and disease resistant varieties, planting at the proper time, maintenance of soil fertility, destruction of host crops or control of insects and diseases on them, cleaning up areas where insects hibernate, and similar practices often reduce the needs for insecticides and fungicides.

Farm Land Values and Rentals

Farm real estate values rose 17 percent during the year ending July 1, 1951. This brought the national index to 202 (1912-14 = 100), 19 percent above the World War I peak and nearly 2½ times the 1935-39 or prewar average (table 6). Land values were at their all-time peak in nearly three-fourths of the States and were still below the World War I peak in only 11 States, most of which were in the North Central region.

The sharpest increases during the last year have occurred in the Corn Belt, the tobacco areas and in the Southwest. The July index was 20 percent or more above a year earlier in 13 States and from 15 to 20 percent higher in 17 States. During the 4 months ended July 1, however, the Southeastern and Mountain States showed the largest gains. In the Corn Belt, where the rise was especially large during the fall and winter of 1950-51, the recent increases were generally below the national average of 5 percent.

Table 6.- Farm real estate 1/: Index numbers of average value per acre and percentage change, by geographic divisions

Geographic division	Index numbers (1912-14 = 100)			Change during year ending:		Change during 4 months ending:	
	1920	1951 March	1951 July	July 1950	July 1951	July 1950	July 1951
				Percent	Percent	Percent	Percent
New England	140	163	167	-1	4	1	2
Middle Atlantic	136	172	181	-1	13	2	5
E. North Central	161	194	200	2	19	1	3
W. North Central	184	163	169	2	17	2	4
South Atlantic	198	255	268	0	18	0	5
E. South Central	199	298	314	0	17	2	5
W. South Central	177	225	235	2	20	2	4
Mountain	151	176	188	-2	19	1	7
Pacific	156	199	210	--7	15	1	6
United States	170	193	202	0	17	2	5

1/ Farm land with improvements as of March 1, except where otherwise indicated.

According to preliminary indications from an October survey of farm real estate dealers and others, the land market has remained relatively stable during the last few months. Although values have continued firm, they are not expected to show as large an increase during the last half of 1951 as during the first half. Demand continues strong, especially for the better grades of farms, but relatively few are for sale. Some tightening of credit was reported and interest rates have shown a tendency to rise. Expanding defense employment is contributing to the demand for small farms and acreages in some areas and investment buying continues to be a factor in the better land areas, although to a somewhat lesser extent than a year ago.

About 45 percent of the purchases made during the year ending March 1, 1951 were cash deals. When credit was used the down payment on the average amounted to slightly more than two-fifths of the purchase price. Probably not more than 10 percent of all purchases involve a debt of more than 75 percent of the purchase price. But the dollar debt per acre and per tract have been rising steadily and the total debt obligation of some recent buyers could still become burdensome even though it appears favorable in relation to current levels of values.

Farmers who rented land on a cash basis or who paid cash rent for pasture and hay lands in addition to a share of the crop paid the highest rates on record in 1951, and some further increase can be expected in 1952. Rental rates on farms rented wholly for cash averaged about 20 percent higher in 1951 than in 1950. The gross value of crop-share rents are expected to total about 5 percent higher but rents received from farms operated under a livestock-share lease may be up 20 percent because of the larger receipts from livestock. Total gross rents from all methods of leasing probably will be about 8 percent higher than in 1950 and about the same as the 1947 peak.

Landlord's expenses on leased lands in 1951 are expected to total about 7 percent more than in 1950, with expenditures for building depreciation and repair, cotton ginning and feed up the most. Net rental income may be about 10 percent higher than in 1950, but 15 percent less than in 1947.

The increase in net rents is substantially less than the increase in land values, however, so the rate of return on the current valuation of leased property will show a further decline. According to preliminary estimates, total net rents in 1951 will amount to about $1.9 billion from an investment currently valued at about $30 billion, or a rate of return of slightly more than 6 percent. This would be the lowest rate of return since 1940.

Interest, Taxes, and Insurance

Interest payments - Interest charges on farm-mortgage debt in 1951 are expected to be about 9 percent higher than in 1950. A further increase is likely in 1952 as a result of an increasing volume of debt and a slight increase in interest rates on new mortgage loans.

The average interest rate on farm-mortgage loans is now 4.7 percent; slightly higher than the 4.6 percent rate which prevailed unchanged during the period 1946-50. But the main reason for the higher interest charge is the increase in the amount of farm mortgage debt. At the beginning of 1950 outstanding farm mortgage debt amounted to 5.4 billion dollars. A year later the total was 5.8 billion dollars, and on July 1, 1951 it is estimated at 6.2 billion dollars.

Interest charges on the non-real-estate debt of farmers, excluding loans made or guaranteed by the Commodity Credit Corporation, are a fifth or more higher in 1951 than in 1950. The total interest cost of short-term debts has not been so high since the period immediately following World War I. The amount of interest which will be paid during 1951 on the non-real-estate debt owed to all types of lenders might be roughly estimated at half a billion dollars.

Although there has been a slight rise in interest rates, the main cause of the increased cost of interest on short-term debts is the huge postwar expansion in use of this type of credit. The total outstanding non-real-estate debt was 7.4 billion dollars on July 1, 1951. Farmers' expenditures for both consumer and producer goods have been heavy since mid-1950 and the rise in non-real-estate debt during that period has been especially great.

On the basis of amounts borrowed from banks and federally sponsored lenders, the greatest increase in non-real-estate credit costs was in the Pacific and West South Central regions. In these States the debt to such lenders rose over a third between July 1, 1950 and July 1, 1951. In the Mountain and West North Central regions the debt level would indicate a rise in interest costs of one-fourth or more during this period. There was practically no change in interest costs on non-real-estate debt in New England.

Some further rise in the cost of non-real-estate farm credit may occur in 1952. But it is doubtful that the increase will be as great as during the year ended July 1, 1951.

Taxes - In 1951 farmers in most States paid out more in taxes than they did in 1950, and they can expect to pay out a still larger amount in 1952. The increase next year will be reflected in about every important tax that farmers pay - property, sales, and income taxes. In some cases they will pay more because they are earning and spending more, but in general it will be because all levels of government are raising levies to get more revenue.

Property taxes, which are the chief source of revenue for local governments, have been increasing for a number of years and probably will continue to do so next year, although at a reduced rate. Those levied against farm real estate in 1950, which are largely being paid in 1951, amounted to $0.64 per acre, or about 5 percent more than in 1949. This brought the index of farm real estate taxes per acre to an all time high of 311 (1909-13 = 100). Levies of 1951 (payable largely in 1952) probably will reflect increases in the neighborhood of 3 or 4 percent when compared with those of 1950. Taxes on personal property also have been increasing along with those on farm real estate.

State governments, which derive their revenue chiefly from sources other than property taxes, have expanded their tax collections significantly since the end of World War II. This trend probably will continue for at least another year. The legislatures in most States met in regular sessions in 1951, and many of them increased taxes of one kind or another. Three States adopted sales taxes and several others which had levied them previously raised their rates. In a number of States special excises were increased on gasoline, alcoholic beverages, and tobacco. Where reductions in some kinds of taxes were voted, they usually were offset by increases in others. There were few changes in State income tax rates, but any increase in net income will mean more income taxes.

Federal taxes also will be higher in 1952. Recent legislation made higher income tax rates effective and increased special excises on alcoholic beverages, cigarettes, gasoline, automobiles, and trucks. Some of these higher rates are to continue in effect at least until 1954.

Insurance - Fire and windstorm insurance assessments paid by farmers to farm mutual companies probably will be higher in 1951 than in either 1950 or 1949. Further increases are expected in 1952. The insurance carried by such companies has increased steadily for many years (9 percent in 1949 and in 1950). The increased assessments paid by farmers have been due primarily to increases in the amounts of insurance carried, rather than to substantial increases in rates per $100 of insurance. In fact, assessment rates of the farm mutual fire insurance companies averaged about 29.2 cents per $100 in 1950, compared with 30.9 cents in 1949. However, the windstorm losses of some of the specialized windstorm mutuals were particularly heavy in 1950, resulting in rate increases averaging about a sixth.

Part of the assessment income of a farm mutual is usually put into its safety fund in the years of below-average losses, for use in the years of heavy losses (sometimes assessments are skipped in the low-loss years). Therefore, the cost of farm mutual insurance is considered to be the sum of losses paid plus operating expenses. Based on the average amount of insurance in force during the year, the losses of the farm fire mutuals averaged 14.3 cents per $100 of insurance in 1950; 14.4 in 1949. Operating expenses averaged 7.9 cents in 1950; 8.4 in 1949, making the total cost to farmers in 1950 about 22.2 cents per $100 compared with 22.8 cents in 1949. Costs per $100 of insurance in 1950 averaged about 16 percent less than they did in 1940.

The safety funds at the end of 1950 of the farm fire mutual companies averaged 54.6 cents per $100, compared with 52.2 at the end of 1949. On the other hand, the safety funds in force at the end of 1950 of the specialized windstorm mutuals were less per $100 of insurance than at the end of 1949. They were 25.3 cents in 1950 compared with 29.8 cents in 1949.

Premiums paid in 1951 by farmers for hail insurance on growing crops were about 15 percent more than in 1950. The largest increases in the amount of insurance paid were on cotton and tobacco. However, more insurance was carried on corn than on any other crop. Because of the unfavorable prospects last winter and this spring for the winter wheat crop in the Southwest, less than the usual amount of crop-hail insurance was purchased by farmers in that area. Loss payments were about average. They were especially high in Georgia and Iowa.

Federal crop insurance was offered in 1951 in 810 counties: On wheat in 356 counties; flax, 61; corn, 98; tobacco, 69; cotton, 101; dry edible beans, 29; citrus fruits, 1; and on multiple crops, in 95 counties. The Federal Crop Insurance Corporation collected more in premiums than it paid out as indemnities to farmers during the 4-year period 1947-50.

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